Abstract

METHOD AND CIRCUIT ARRANGEMENT WITH A LINEAR VARIABLE DIFFERENTIAL TRANSFORMER AS A DISPLACEMENT SENSOR OR FORCE SENSOR

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In a circuit arrangement having a linear variable differential transformer as a displacement sensor or force sensor, having a selection circuit which is connected to the primary coil of the transformer and which provides an output current for triggering the primary coil, and having an analysis circuit which is connected to the secondary coils of the transformer and which provides a message signal, a control circuit used for triggering the selection circuit and the analysis circuit and for processing the measurement signal provided by the analysis circuit is connected to the primary coil in order to calculate the temperature of the circuit arrangement, and is configured such that it determines the temperature-dependent ohmic resistance of the primary coil and calculates from it the temperature and corrects accordingly the measurement signal provided by the analysis circuit.